

## CLAIMS

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1.           A bottled liquid dispenser having:
  - a vertically elongate housing with a back, opposite sides and a front, the front of the housing having a dispensing recess and a bottle opening located below the dispensing recess to receive a bottle of liquid;
  - a reservoir contained within the housing;
  - at least one discharge outlet located at the top of the dispensing recess through which liquid is dispensed from the reservoir;
  - the bottle opening having a bottom forming a bottle-support platform, a top, and a pair of sides formed by said opposite sides of the housing;and
  - a dip tube for insertion into a bottle within the opening, said dip tube being in fluid communication with the reservoir;

in which the front margin of the bottle-support platform is substantially part-circular and projects beyond the side margins of the bottle opening in a forward direction.
2.           A bottled liquid dispenser according to Claim 1, in which the front margin of the bottle-support platform is substantially semi-circular
3.           A bottled liquid dispenser according to Claim 1, in which the bottle-support platform is fixed relative to the housing.
4.           A bottled liquid dispenser according to Claim 1, in which the top of the bottle opening has a part-circular front margin which projects

beyond the side margins of the bottle opening in a forward direction.

5. A bottled liquid dispenser according to Claim 1, in which the distance between the top of the bottle opening and the bottle-support platform is substantially twice the distance between the sides of the bottle opening.
6. A bottled liquid dispenser according to Claim 1, which includes a lead screw arranged to move a follower nut which is coupled to the dip tube to move the dip tube into and out of the bottle, and a motor for rotating the lead screw.
7. A bottled liquid dispenser according to Claim 6, in which the dip tube is inclined relative to a vertical axis.
8. A bottled liquid dispenser according to Claim 1, in which the bottle opening has a door of substantially hemi-cylindrical shape.
9. A bottled liquid dispenser according to Claim 8, in which the door is arranged to slide over the dispensing recess.
10. A bottled liquid dispenser according to Claim 8, in which movement of the door causes the dip tube to move into the bottle when the door is lowered and move out of the bottle when the door is raised.
11. A bottled liquid dispenser according to Claim 1, which includes a hollow probe for insertion into the bottle and means for moving the probe in and out of the bottle, the dip tube being arranged to pass through the

probe into the bottle.

12. A bottled liquid dispenser according to Claim 11, in which the dip tube is angularly disposed relative to the probe and passes through the side of the probe.

13. A bottled liquid dispenser according to Claim 11, including a clamping member which is arranged to exert downward pressure on the bottle when the probe is withdrawn from the bottle.

14. A bottled liquid dispenser according to Claim 13, in which the clamping member is located about the probe.

15. A bottled liquid dispenser according to Claim 13, in which the clamping member is operably coupled to the probe.

16. A bottled liquid dispenser according to Claim 13, in which the clamping member is connected to two pairs of pivotally-connected toggle arms on opposite sides of the probe arranged such that when the arms are angularly disposed the clamping member is raised out of engagement with the bottle and movement of the arms towards a substantially linear configuration urges the clamping member against the bottle.

17. A bottled liquid dispenser according to Claim 16, in which the arms move over-centre to hold the clamping member against the bottle.

18. A bottled liquid dispenser according to Claim 16, in which the arms are moved by a pair of linkages which are pivotally connected between

the arms and the probe.

19. A bottled liquid dispenser according to Claim 11, in which the means for moving the probe includes a lead screw and a nut.

20. A bottled liquid dispenser according to Claim 19, in which the lead screw is connected to the probe and the nut is rotated by means of a motor.

21. A bottled liquid dispenser according to Claim 1, in which a pump is connected between the dip tube and the reservoir.

22. A bottled liquid dispenser according to Claim 21, in which a liquid accumulator is connected between the pump and the reservoir.

23. A bottled liquid dispenser according to Claim 21, including sensing means for stopping the pump when air is present in the liquid path between the dip tube and the pump.

24. A bottled liquid dispenser having:

- a dip tube for insertion into a bottle;
- a lead screw arranged to move a follower nut which is coupled to the dip tube to move the dip tube into and out of the bottle;
- a motor for rotating the lead screw;
- a reservoir in fluid communication with the dip tube to receive liquid from the bottle;
- a pump arranged to cause movement of liquid from the bottle via the dip tube to the reservoir; and
- at least one discharge outlet through which liquid is dispensed from the reservoir.

25. A bottled liquid dispenser according to Claim 24, in which the dip tube is inclined relative to a vertical axis.

26. A bottled liquid dispenser according to Claim 24, in which the pump is connected between the dip tube and the reservoir.

27. A bottled liquid dispenser according to Claim 26, in which a liquid accumulator is connected between the pump and the reservoir.

28. A bottled liquid dispenser according to Claim 26, including sensing means for stopping the pump when air is present in the liquid path between the dip tube and the pump.

29. A bottled liquid dispenser having:

- a hollow probe for insertion into a bottle;
- means for moving the probe in and out of the bottle;
- a dip tube for insertion into a bottle, the dip tube being arranged to pass through the probe into the bottle;
- means for moving the dip tube into and out of the bottle;
- a reservoir in fluid communication with the dip tube to receive liquid from the bottle;
- a pump arranged to cause movement of liquid from the bottle via the dip tube to the reservoir; and
- at least one discharge outlet through which liquid is dispensed from the reservoir.

30. A bottled liquid dispenser according to Claim 29, in which the dip tube is angularly disposed relative to the probe and passes through the side of the probe.

31. A bottled liquid dispenser according to Claim 29, including a clamping member which is arranged to exert downward pressure on the bottle when the probe is withdrawn from the bottle.

32. A bottled liquid dispenser according to Claim 31, in which the clamping member is located about the probe.

33. A bottled liquid dispenser according to Claim 31, in which the clamping member is operably coupled to the probe.

34. A bottled liquid dispenser according to Claim 31, in which the

clamping member is connected to two pairs of pivotally-connected toggle arms on opposite sides of the probe arranged such that when the arms are angularly disposed the clamping member is raised out of engagement with the bottle but movement of the arms towards a substantially linear configuration presses the clamping member against the bottle.

35. A bottled liquid dispenser according to Claim 34, in which the arms move over-centre to hold the clamping member against the bottle.

36. A bottled liquid dispenser according to Claim 34, in which the arms are moved by a pair of linkages which are pivotally connected between the arms and the probe.

37. A bottled liquid dispenser according to Claim 29, in which the means for moving the probe includes a lead screw and a nut.

38. A bottled liquid dispenser according to Claim 37, in which the lead screw is connected to the probe and the nut is rotated by means of a motor.